

IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) Process for the wall ironing of a product in sheet form, which is formed from a metal sheet coated on at least one side with a layer of plastic, comprising

moving the product with a plastic coating layer in a direction of movement along a forming surface of a wall-ironing tool during the wall ironing, the forming surface comprising a plurality of zones along a length of the forming surface, each zone being at an entry angle with respect to the direction of movement of the product, the plurality of zones comprising a starting zone and a subsequent zone, the product moving along the starting zone and subsequently moving along the subsequent zone,

wherein the entry angle varies over the length of the forming surface, in the direction of movement of the product past the forming surface, this entry angle being smaller in a the starting zone of the forming surface than in the subsequent zone of the forming surface thereof.

2. (Currently Amended) Process according to Claim 1, wherein after moving along the subsequent zone the product moves along an end zone of the forming surface, wherein the entry angle in an the end zone is again at a smaller entry angle than in the subsequent intermediate zone.

3. (Currently Amended) Process according to Claim 1, wherein one zone of said plurality of zones has a largest entry angle relative to other said zones and the forming surface, following the one zone with the largest entry angle, comprises a so-called land zone γ with an entry angle = 0° .

4. (Currently Amended) Process according to Claim 2, wherein the entry angle of each zone has a fixed value in each of the zones.

5. (Previously Presented) Process according to Claim 2, wherein there is a smooth change in the entry angle over the length of the forming surface.

6. (Currently Amended) Process according to Claim 5, wherein the forming surface further comprises transitions between successive zones, and/or such zones themselves which run in the form of an arc of a circle.

7. (Previously Presented) Process according to Claim 1, wherein the wall-ironing tool comprises a plurality of forming surfaces.

8. (Previously Presented) Process according to Claim 1, wherein the wall-ironing tool comprises a plurality of wall-ironing rings.

Bl 9. (Currently Amended) Process according to Claim 1 ~~3~~, wherein the moving step thins walls of the product, and 60 to 90% of ~~the~~ total wall thinning is produced by the ~~corresponding forming surface in the~~ one zone ~~running at~~ having the largest entry angle ~~, the so-called main zone.~~

10. (Previously Presented) Process according to Claim 9, wherein 10 to 30% of the total wall thinning is produced by the corresponding forming surface in the starting zone.

11. (Currently Amended) Process according to Claim 9, wherein after moving along the subsequent zone the product moves along an end zone of the forming surface, wherein the entry angle in the end zone is smaller than in the subsequent zone, wherein less than 30% of the total wall thinning is produced by the corresponding forming surface in the end zone.

12. (Currently Amended) Process according to Claim 1, wherein after moving along the subsequent zone the product moves along an end zone of the forming surface,

wherein ~~a~~ the length of the starting zone and/or a length of the end zone, under otherwise identical conditions, is set in such a way that the plastic coating is not torn off the metal sheet as a result of the wall ironing.

13. (Withdrawn) Process for the wall ironing of a product in sheet form, which is formed from a metal sheet coated on at least one side with a layer of plastic, comprising

moving the product with a plastic coating layer in a direction of movement along a forming surface of a wall-ironing tool during the wall ironing, the forming surface being at an entry angle with respect to the direction of movement of the product,

wherein in a zone of the forming surface which runs at the largest entry angle, the plastic layer is held under an elevated pressure P_0 (in MPa) on all sides, and the plastic used for the coating layer is characterized by values of the parameters μ (no units); τ_0 (in MPa) and A_0 (in sec), which are as follows:

$\mu \geq 0.03$; $\tau_0 \geq 0.60$ and $A_0 \geq 2.0 \times 10^{19}$.

14. (Withdrawn) Process according to Claim 13, wherein the parameters μ , τ_0 and A_0 are as follows: $\mu \geq 0.047$; $\tau_0 \geq 0.90$ and $A_0 \geq 3.0 \times 10^{19}$.

15. (Withdrawn) Process according to Claim 13, wherein the plastic used is also characterized by values for the parameters $T_{g, 1 \text{ atm}}$ and $T_{g, 600 \text{ MPa}}$ (in °C) which are as follows: $T_{g, 1 \text{ atm}} \geq 30^\circ\text{C}$, and $T_{g, 600 \text{ MPa}} \geq 200^\circ\text{C}$.

16. (Withdrawn) Process according to Claim 15, wherein the parameter $T_{g, 1 \text{ atm}}$ is as follows: $T_{g, 1 \text{ atm}} \geq 70^\circ\text{C}$.

17. (Currently Amended) Wall-ironing tool comprising a wall-ironing ring, comprising a forming surface, along which a sheet-like product is movable ~~can be moved~~ in a direction of movement during the wall ironing, ~~which the~~ the forming surface comprising a plurality of zones along a length of the forming surface, the plurality of zones comprising a starting zone and a subsequent zone downstream of the starting zone with respect to the direction of movement of the sheet-like product, each zone being is at an entry angle with respect to the direction of movement of the product, wherein the entry angle varies over the length of the forming surface, in the direction of movement of the product, this angle being smaller in a the starting zone of the forming surface than in the subsequent zone of the forming surface thereof.

bl 18. (Currently Amended) Wall-ironing tool according to Claim 17, wherein ~~the subsequent zone is an intermediate zone and~~ the plurality of zones of the forming surface further comprises an end zone subsequent to the intermediate zone downstream of the subsequent zone with respect to the direction of movement of the sheet-like product, the end zone having ~~which is again at a smaller entry angle than in the intermediate subsequent zone.~~

19. (Currently Amended) Wall-ironing tool according to Claim 17, wherein the plurality of zones of the forming surface further comprises an end zone downstream of the subsequent zone with respect to the direction of movement of the sheet-like product, subsequent to the intermediate zone, and between the ~~intermediate~~ subsequent zone and the end zone there is a land zone with a length of between 0.3 and 1.5 mm.

20. (Currently Amended) Wall-ironing tool according to Claim 17, wherein the entry angle has a fixed value in each zone of the plurality of zones.

21. (Previously Presented) Wall-ironing tool according to Claim 17, wherein there is a smooth change in the entry angle over the length of the forming surface.

22. (Currently Amended) Wall-ironing tool according to Claim 21, wherein ~~the~~ transitions between successive zones of the plurality of zones ~~zone~~, and/or the zones themselves, run in the form of an arc of a circle with a radius of a length of between 0.1 and 10 mm.

23. (Currently Amended) Wall-ironing tool according to Claim 17, wherein the zone of the plurality of zones having the largest entry angle, which is named a main zone, forms between 60 and 90% of the transverse dimension of the forming surface, transversely with respect to its longitudinal direction.

24. (Previously Presented) Wall-ironing tool according to Claim 23, wherein the starting zone forms between 10 and 30% of the transverse dimension of the forming surface.

25. (Currently Amended) Wall-ironing tool according to Claim 23, the plurality of zones further comprising an end zone downstream of the subsequent zone with respect to the direction of movement of the sheet-like product, subsequent to the intermediate zone, wherein the end zone forms less than 30% of the transverse dimension of the forming surface.

26. (Previously Presented) Wall-ironing tool in the form of a wall-ironing ring, according to Claim 17, wherein this wall-ironing ring is under a radial prestress on its outer circumferential surface, due to a strip or wire which has been wound around the ring under stress.